AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application.

LISTING OF CLAIMS:

1. (Currently Amended) An image processor for detecting a specified color comprising:

a first decision controller which decides whether each input color component gradation value of a target pixel exists in a respective first range for each of the color components ,the range being defined by a preset minimum and a preset maximum gradation value for each color component;

a second decision controller which decides whether differences between each color component gradation value of the target pixel and those of pixels adjacent thereto exist in a respective second range ~~for each linear calculation~~ that is different from the first ranges wherein the second range is preset in accordance with the specified color; and

a color decision controller which decides that the target pixel has **[[**a**]]** the specified color when the first decision controller decides that each color component gradation value of the target pixel exists in the first ranges and the second decision controller decides that the differences exist in the second ranges.

2. (Previously Presented) The image processor according to claim 1, wherein said second decision controller determines a maximum value among

differences of color gradation value between the target pixel and the adjacent pixels thereof and decides whether the maximum value exists in the second ranges.

3. (Previously Presented) The image processor according to claim 1, further comprising an edge detector which calculates differences in the color gradation value between the target pixel and a plurality of adjacent pixels thereof in a direction and decides a position of an edge based on the differences.

4. (Canceled)

5. (Currently Amended) A method of image processing to detect a specified color comprising the steps of:

inputting color component gradation values for an image;

deciding whether each input color component gradation value of a target pixel exists in a respective first range for each of the color components, the range being defined by a preset minimum and a preset maximum gradation value for each color component;

deciding whether differences between each color component gradation value of the target pixel and those of pixels adjacent thereto exist in a respective second range ~~for each linear calculation~~ that is different from the first ranges wherein the second range is preset in accordance with the specified color; and

deciding that the target pixel has **[[**a**]]** the specified color when each color component gradation value of the target pixel is decided to exist in the first ranges and the differences are decided to exist in the second ranges.

6. (Previously Presented) The method according to claim 5, wherein a maximum value among differences of color gradation value between the target pixel and the adjacent pixels thereof are obtained and it is decided whether the maximum value exists in the second ranges.

7. (Canceled)

8. (Currently Amended) A computer readable medium storing a computer program comprising the steps of:

deciding whether each input color component gradation value of a target pixel exists in a respective first range for each of the color components, the range being defined by a preset minimum and a preset maximum gradation value for each color component;

deciding whether differences between each color component gradation value of the target pixel and those of pixels adjacent thereto exist in a respective second range ~~for each linear calculation~~ that is different from the first ranges wherein the second range is preset in accordance with a specified color; and

deciding that the target pixel has **[[**a**]]** the specified color when each color component gradation value of the target pixel is decided to exist in the first ranges and the differences are decided to exist in the second ranges.

9. (Previously Presented) The recording medium according to claim 8, wherein a maximum value among differences of color gradation value between the target pixel and the adjacent pixels thereof are obtained and it is decided whether the maximum value exists in the second ranges.

10. (Canceled)

11. (Currently Amended) An image processor for detecting a specified color comprising:

a first decision controller which decides whether each input color component gradation value of a target pixel exists in a respective first range for each of the color components, the range being defined by a preset minimum and a preset maximum gradation value for each color component;

a second decision controller which performs a linear calculation between each color component gradation value of the target pixel and decides whether results of the calculation exist in a respective second range for each linear calculation that is different from the first ranges wherein the second range is preset in accordance with the specified color; and

a color decision controller which decides that the target pixel has **[[**a**]]** the specified color when the first decision controller decides that each color component gradation value of the target pixel exists in the first ranges and the second decision controller decides that the results exist in the second ranges.

12. (Previously Presented) The image processor according to claim 11, wherein said second decision controller calculates differences between the color component gradation value of the target pixel and decides whether the differences exist in the second ranges.

13. (Canceled)

14. (Currently Amended) A method of image processing to detect a specified color comprising the steps of:

inputting color component gradation values for an image;

deciding whether each input color component gradation value of a target pixel exists in a respective first range for each of the color components, the range being defined by a preset minimum and a preset maximum gradation value for each color component;

performing a linear calculation between each color component gradation value of the target pixel and ~~decides~~ deciding whether results of the calculation exist in a respective second range for each linear calculation that is different from the first ranges wherein the second range is preset in accordance with the specified color; and

deciding that the target pixel has **[[**a**]]** the specified color when each color component gradation value of the target pixel is decided to exist in the first ranges and the results are decided to exist in the second ranges.

15. (Previously Presented) The method according to claim 14, wherein the differences between the color component gradation value of the target pixel are obtained in the calculation on the input color gradation value and it is decided whether the differences exist in the second ranges.

16. (Canceled)

17. (Currently Amended) A computer readable medium storing a computer program comprising the steps of:

deciding whether each input color component gradation value of a target pixel exists in a respective first range for each of the color components, the range being defined by a preset minimum and a preset maximum gradation value for each color component;

performing a linear calculation between each color component gradation value of the target pixel and deciding whether results of the calculation exist in a respective second range for each linear calculation that is different from the first ranges wherein the second range is preset in accordance with a specified color; and

deciding that the target pixel has **[[a]]** the specified color when each color component gradation value of the target pixel is decided to exist in the first ranges and the results are decided to exist in the second ranges.

18. (Previously Presented) The method according to claim 17, wherein the color gradation value includes a plurality of color component gradation value, differences between the color component gradation value of the target pixel are obtained in the calculation on the input color gradation value and it is decided whether the differences exist in the second ranges.

19. (Canceled)

20. (Previously Presented) The image processor according to claim 1, further comprising:

an extraction controller which extracts an element having a predetermined shape based on the decision by said color decision controller; and

a pattern detector which detects a specified pattern in an image discriminating whether the elements extracted by said extraction controller have a predetermined relationship between them.

21. (Currently Amended) The method according to claim 5, further comprising the steps of:

extracting an element having a predetermined shape based on the decision that the target pixel has **[[**a**]]** the specified color; and

detecting a specified pattern in an image by discriminating whether the extracted elements have a predetermined relationship between them.

22. (Currently Amended) The recording medium according to claim 8, the program further comprising the steps of:

extracting an element having a predetermined shape based on the decision that the target pixel has **[[**a**]]** the specified color; and

detecting a specified pattern in an image by discriminating whether the extracted elements have a predetermined relationship between them.

23. (Previously Presented) The image processing according to claim 11, further comprising:

an extraction controller which extracts an element having a predetermined shape based on the decision by said color decision controller; and

a pattern detector which detects a specified pattern in an image discriminating whether the elements extracted by said extraction controller have a predetermined relationship between them.

24. (Currently Amended) The method according to claim 14, further comprising the steps of:

extracting an element having a predetermined shape based on the decision that the target pixel has **[[**a**]]** the specified color; and

detecting a specified pattern in an image by discriminating whether the extracted elements have a predetermined relationship between them.

25. (Currently Amended) The method according to claim 17, the program further comprising the steps of:

extracting an element having a predetermined shape based on the decision that the target pixel has **[[**a**]]** the specified color; and

detecting a specified pattern in an image by discriminating whether the extracted elements have a predetermined relationship between them.

26. (New) The image processor according to claim 1, wherein the second range is preset in advance in accordance with the specified color so that maximum values dRmax, dGmax and dBmax, and minimum values dRmin, dGmin and dBmax of differences dR, dG and dB of R, G and B data of adjacent pixels have been determined beforehand and the second decision means decides that the target pixel is a detection color candidate when:

$dRmin \leqq dR \leqq dRmax$;

$dGmin \leqq dG \leqq dGmax$; and

$dBmin \leqq dB \leqq dBmax$

27. (New) The image processor according to claim 11, wherein the second range is preset in advance in accordance with the specified color so that as to the input image data of an i-th pixel having color component gradation values Ri, Gi, Bi, the specified color having color component gradation values R, G, B, and Gmin, Gmax, Bmin and Bmax determined beforehand, the second decision means decides that the target pixel is a detection color candidate when

$R\text{-}Gmin \leqq Ri\text{-}Gi \leqq R\text{-}Gmax$;

$G\text{-}Bmin \leqq Gi\text{-}Bi \leqq G\text{-}B\ max$; and

$R\text{-}B\ min \leqq Ri\text{-}Bi \leqq R\text{-}Bmax$